

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Divisional Patent Application of:)
Richard W. Gross et al.) Group Art Unit: **2662 (expected)**
New Divisional Application based on Serial) Examiner: **Ahmed Elallam (expected)**
No. 10/189,212
Filed: **August 7, 2003**)
For: **SPLITTERLESS MULTICARRIER**)
MODEM

INFORMATION DISCLOSURE STATEMENT

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

August 7, 2003

Sir:

In accordance with the duty of disclosure as set forth in 37 C.F.R. §1.56, Applicants hereby submit the following information in conformance with 37 C.F.R. §§ 1.97 and 1.98. Pursuant to 37 C.F.R. § 1.98, a copy of each of the documents were cited in the parent application.

The documents are being submitted within three (3) months of the filing of this application or entry into the national stage of this application, or before the first Office Action on the merits, whichever is later, therefore no fee or certification is required under 37 C.F.R. § 1.97(b).

It is requested that the accompanying information disclosure statement be considered and made of record in the above-captioned application. To assist the Examiner, the documents are listed on the attached form PTO-1449. It is respectfully requested that an Examiner initialed copy of this form be returned to the undersigned.

The Commissioner is hereby authorized to charge any fees connected with this filing which may be required now, or credit any overpayment to Deposit Account No. 19-2380 (081513-124).

Respectfully submitted,

By:

Jason H. Vick

Registration No. 45,285

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Substitute for form 1449A/PTO INFORMATION DISCLOSURE STATEMENT BY APPLICANT <i>(use as many sheets as necessary)</i>				Complete if Known			
				Application Number		New Divisional Application based on USSN: 10/189,212	
				Filing Date		August 7, 2003	
				First Named Inventor		Richard W. Gross et al.	
				Examiner Name		Ahmed Elallam (expected)	
Sheet	1	of	5	Attorney Docket Number		081513-336	

U.S. PATENT DOCUMENTS						
Examiner Initials ¹	Cite No. ¹	U.S. Patent Document		Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document MM-DD-YYYY	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number	Kind Code ² (if known)			
		3,573,380		Darlington	04/06/1971	
		4,131,766		Narasimha	12/26/1978	
		4,568,156		Dane	02/04/1986	
		4,679,227		Hughes-Hartogs	07/07/1987	
		4,731,816		Hughes-Hartogs	03/15/1988	
		4,802,190		Schouhamer Immink	01/31/1989	
		4,912,763		Galand et al.	03/27/1990	
		5,048,054		Eyuboglu et al.	09/10/1991	
		5,128,964		Mallory	07/07/1992	
		5,206,886		Bingham	04/27/1993	

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		Office ³	Number ⁴	Kind Code ⁵ (if known)				
			EP 0 473 465	B1		03/04/1992		
			EP 0 652 677	A2		05/10/1995		
			EP 0 703 685	A2		03/27/1996		
			EP 0 753 947	A1		01/15/1997		
			EP 0 762 701	A2		03/12/1997		

OTHER PRIOR ART - NON PATENT LITERATURE DOCUMENTS			
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		John A. C. Bingham (May 1990), "Multicarrier Modulation For Data Transmission: An Idea Whose Time Has Come," <u>IEEE Communications Magazine</u> , pp. 5-14.	
		Shoham et al. (September 1988), "Efficient Bit Allocation for an Arbitrary Set of Quantizers," <u>IEEE Transactions on Acoustics, Speech and Signal Processing</u> , 36(9): 1445-1453.	

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¹ Unique citation designation number. ² See attached Kinds of U.S. Patent Documents. ³ Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴ For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵ Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. ⁶ Applicant is to place a check mark here if English language Translation is attached.

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		Number	Kind Code ² (if known)			
		5,285,474		Chow et al.	02/08/1994	
		5,327,574		Monma et al.	07/05/1994	
		5,400,322		Hunt et al.	03/21/1995	
		5,428,790		Harper et al.	06/27/1995	
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		Office ³	Number ⁴	Kind Code ⁵ (if known)			
			EP 0 812 087	A2		12/10/1997	
			EP 0 820 168	A2		01/21/1998	
			EP 0 840 474	A2		05/06/1998	
			EP 0 905 948	A2		03/31/1999	
			WO 86/07223			12/04/1986	

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Examiner Initials [*]	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T ²
		John M. Cioffi "A Multicarrier Primer,;" Amati Communications Corporation and Stanford University, pp.1-18.	
		John A. C. Bingham (May 1996), "RFI Suppression in Multicarrier Transmission Systems," Amati Communications, IEEE Communications Magazine, pp. 1026-1030.	

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		Number	Kind Code ² (if known)			
		5,596,604		Cioffi et al.	01/21/1997	
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		5,625,651		Cioffi	04/29/1997	
		5,636,246		Tzannes et al.	06/03/1997	
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		5,805,669		Bingel et al.	09/08/1998	
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		Office ³	Number ⁴	Kind Code ⁵ (if known)			
			WO 97/15131			04/24/1997	
			WO 98/10556			03/12/1998	
			WO 98/27665			06/25/1998	
			WO 98/57472			12/17/1998	
			WO 98/59476			12/30/1998	

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		Atungsiri et al. (June 1997), "Multirate Coding for Mobile Communications Link Adaptation," IEEE Proc. Commun., 144(3):211-216.	
		Related Application USSN. 09/597,926 with a copy of Preliminary Amendment as filed.	

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		Number	Kind Code ² (if known)			
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		Office ³	Number ⁴	Kind Code ⁵ (if known)				
			WO 99/16224			09/09/1998		
			WO 99/18701			04/15/1999		
			JP 60-112357			06/18/1985		
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			JP 11-168515			06/22/1999		

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		6,055,297		Terry	04/25/2000	
		6,061,392		Bremer et al.	05/09/2000	
		6,065,060		Liu et al.	04/2000	
		6,072,779		Tzannes et al.	06/06/2000	
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		6,101,216		Henderson et al.	08/08/2000	
		6,128,335		Liu et al.	10/02/2000	
		6,144,696		Shively et al.	11/07/2000	
		6,161,203		Zuranski et al.	12/12/2000	
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